

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARK E. TUTTLE

Appeal No. 96-0086
Application 07/979,607¹

ON BRIEF

Before KRASS, JERRY SMITH and HECKER, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 22, all of the claims pending in the application.

¹ Application for patent filed November 20, 1992.

The invention pertains to the remote testing of IC chips by employing radio frequency (RF) transmission.

The nature of the invention is clear from an analysis of representative independent claim 1, reproduced as follows:

1. A testing system for evaluating an integrated circuit chip comprising:

(A) an interrogator unit having a radio communication range, the interrogator unit comprising data evaluation means for transmitting interrogating information via radio communication and for receiving test data via radio communication;

(B) an integrated circuit chip positioned remotely from the interrogator unit, but within the radio communication range, comprising:

operational circuitry;

test interface circuitry electrically coupled to the operational circuitry and including means for receiving the interrogating information from the data evaluation means of the interrogator unit, the test interface circuitry test cycling the operational circuitry according to the interrogating information, the test interface circuitry including means for transmitting via radio communication test data output by the operational circuitry in response to the interrogating information back to the data evaluation means of the interrogator unit; and

the data evaluation means including means for examining the test data to determine whether the integrated circuit chip has a defect.

The examiner relies on the following reference:

Katayama

5,113,184

May 12, 1992

Claims 1 through 22 stand rejected under 35 U.S.C. § 103 as unpatentable over Katayama.

Reference is made to the brief and answer for the respective positions of appellant and the examiner.

OPINION

We reverse.

Each of the claims on appeal recites, and requires, at least a testing system or method, wherein there is some test interface circuitry and a data evaluation, and radio communication between an interrogator unit and a remote IC chip being tested.

The reference applied by the examiner is directed to a data communication system and method for an IC card. Katayama is neither concerned with any type of test at all nor with radio communication, elements and/or steps which are crucial to the instant claimed subject matter.

While the examiner recognizes these deficiencies in Katayama, the examiner contends that it would have been obvious to modify Katayama to test an IC because “one would want to know

whether defects are present in one's integrated circuit" [answer-page 4]. Also, while the examiner recognizes the lack of any specific teaching of radio communication in Katayama, the examiner explains that radio communication is "part of the electromagnetic spectrum" [answer-page 4] and Katayama does teach electromagnetic communication.

The examiner has failed to establish a prima facie case of obviousness with regard to the instant claimed subject matter and the examiner's rationale for modifying Katayama is clearly based on impermissible hindsight.

While it might very well be that "one would want to know whether defects are present in one's integrated circuit," there is simply no teaching or suggestion of any kind of testing operation in Katayama and the examiner has presented no cogent rationale as to why the skilled artisan having Katayama's system before him/her would have been led to test the integrated circuits of Katayama and, moreover, to test the circuits in the specific manner claimed.

Further, while Katayama may refer to "electromagnetic coupling," there is no suggestion, within the four corners of the reference, to test integrated circuits by radio communication. Had the instant claims broadly recited "electromagnetic coupling" and the reference disclosed radio communication, we

might agree that the reference taught that claimed element since radio communication is a type, or subset, of “electromagnetic coupling.” But, in our view, it is blatant hindsight for the examiner to point to a general disclosure of “electromagnetic coupling” in the reference and conclude that the reference teaches or suggest the use of radio communication to test integrated circuits.

The only common element we can find between the instant claimed invention and that disclosed by Katayama is that Katayama has an integrated circuit. Katayama lacks disclosure of more claimed elements and/or steps than it teaches. It would have been better had the examiner not focused only on the integrated circuit aspect of the claimed invention when selecting a reference and, instead, had located a reference or references disclosing remote testing by radio communication.

The examiner’s belated reliance on the Fujioka reference², at page 6 of the answer, for a teaching of radio frequency coupling is improper. First, while the reference refers to data transmitted and received by radio waves, there is no indication of any testing achieved thereby. More importantly, this reference forms no part of the statement of the outstanding rejection against the claims and there would appear to be no excuse for not positively including the reference in the statement of the rejection.

In re Hoch, 428 F.2d 1341, 1142 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970).

² U.S. Patent No. 5,212,373, issued May 18, 1993 (filed Oct. 31, 1990), of record in the application file.

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The examiner's decision rejecting claims 1 through 22 under 35 U.S.C. § 103 is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JERRY SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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STUART N. HECKER)	
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